CIVIL AFRONAUTICS BOARD

ACCIDENT INVESTIGATION REPORT

Adopted: December 23, 1949

Released: December 27, 1949

PACIFIC ALASKA AIR EXPRESS DC-3, REPORTED MISSING NOVEMBER 4, 1948, BETWEEN YAKUTAT, ALASKA, AND SEATTLE, WASHINGTON

The Accident

On November 4, 1948, an airplane owned and operated by Pacific Alaska Air Express, a DC-3, NC-66637, was reported missing between Yakutat, Alaska, and Seattle, Wash. The airplane has not been found, and the 15 passengers and two crew members are presumed lost.

History of the Flight

At approximately 2226, November 3, 1948. the flight departed Anchorage for Seattle, Wash., via Homer, Yakutat, and Annette Island, Alaska, with a crew consisting of A R. Kinnear, pilot, and R A Wilson, copilot. The flight arrived at Yakutat, Alaska, at 0257, November 4, 1948, without incident. At Yakutat an instrument flight plan was filed specifying a cruising altitude of 10,000 feet to Annette Island, the next intended stop.

At 0407, the flight took off from Yakutat with the same crew, 15 passengers, 800 gallons of fuel, and no cargo. Total airplane weight was within the certified limit and the airplane was properly loaded. A position report was received from the flight by Gustavus Radio at 0510 to the effect that the flight was cruising at 10,000 feet, 146 miles southeast of Yakutat, and that it estimated arriving over Sitka, Alaska, 240 miles southeast of Yakutat, at 0544. This was the last communication received from the flight.

Approximately one hour after the flight's estimated arrival time over Sitka, an emergency warning was issued by CAA Communications to all radio stations between Anchorage and Seattle. Also alerted was the Civil Aeronautics Board,

the 10th Air and Sea Rescue Squadron, and the Coast Guard Air Facility. At 0700 the Coast Guard dispatched a search plane to the area over which the flight had last reported, but no trace of the airplane or its occupants was found

Investigation

From November 4 to November 23, an extensive air search of the Sitka and Yakutat area was made by the Coast Guard and the 10th Air and Sea Rescue Squadron Since then other searches have been made by the 10th Air and Sea Rescue Squadron, the Coast Guard, and private aircraft flying the route between Seattle and Anchorage. To date no reliable evidence of the airplane or of the survivors has been found. However, small pieces of material which were identified only as being from a transport type aircraft were found near Chicagof Island, 184 miles southeast of Yakutat.

On November 5, 1948, the day after the flight had been made, the west course of Yakutat Range was flight checked and found to be within tolerances. The following day the southeast course of Gustavus Range and Sitka Range were checked and they also were found to be operating normally.

As far as can be determined the airplane was in satisfactory operating condition at the time of departure from
Anchorage and from Yakutat. The crew had
made no complaints of mechanical difficulty at either station, and the airplane
was reported to be "mechanically O.K." by
the last crew that had flown it into
Anchorage November 2, 1948. No maintenance records of the airplane were available for study because they were aboard
the airplane at the time it disappeared.

At the time of departure from Yakutat there were scattered alto-cumulus clouds

^{*}All times referred to herein are Alaska Standard Time based on the 24-hour clock.

with bases at 9,000 feet and tops at 12,000 feet between Yakutat and Sitka. South of Sitka alto-cumulus and altostratus clouds formed a ceiling between 9,000 and 12,000 feet which was broken to overcast. Below this layer there was another layer of the same type clouds between 3,000 and 9,000 feet. Light rain showers occurred along the entire route which reduced ceilings to 2,000 feet, and surface visibility to eight miles. Turbulence below 12,000 feet was light to moderate but above 12,000 feet the air was relatively stable. Temperature ranged from a -23 degree centigrade at Yakutat to a -18 degree centigrade at Annette Island Relative humidity at the cruising altitude of 10,000 feet increased from 45 percent at Yakutat to 85 percent at Annette Island. Winds at 10,000 feet were reported to be from 190 degrees at 30 miles per hour over Yakutat and from 220 degrees at 45 miles per hour over Annette Island.

Full weather information was given to the crew by the forecaster at Anchorage, but no record was found in the weather bureau office at Yakutat that the crew had obtained weather information there.

Captain Andrew R. Kinnear, age 28, held a valid airman certificate with an airline transport pilot rating. He had been employed by the Pacific Alaska Air Express since August 10, 1948 Hıs total flying time was 3,600 hours, of which approximately 3,200 was accumulated in multi-engine equipment. His total flying time in the last 30 days was 97 hours, and he had had a three-day rest period prior to this flight Hıs last instrument check was accomplished October 13. 1948, and his last CAA physical was accomplished October 20, 1948. At the time of the accident he had made approximately 10 flights over the Anchorage-Seattle route, four of which had been made with Copilot Wilson.

Copilot Richard A. Wilson, age 28, was employed by the company August 30, 1948, as a pilot mechanic. Company records indicated that he held an airman certificate 518396 with a multi-engine and instrument rating, that his total time was 1,800 hours of which 325 hours were in multi-engine equipment. However, Airman Records of the Civil Aeronautics

Administration indicate that he held only a student certificate, S-1073921 and an A&E license No. 518396

Analysis

As far as can be determined the airplane was in good operating condition when it departed Yakutat. The last radio transmission received from the flight was a routine position report which indicated that the flight was at its cruising altitude of 10,000 feet, proceeding normally on course. At 10,000 feet the airplane should have been in ice clouds which would not constitute an icing problem, and the temperature was too low for carburetor icing. Therefore, there appears to be no reliable evidence upon which a probable cause of this accident can be The search for the airplane and its occupants will again be intensified, weather permitting, in the spring of 1950

Findings

- 1 The airplane and carrier were properly certificated
- 2 The captain was properly certificated, the copilot held only a student pilot certificate.
- 3 The airplane was in satisfactory operating condition when it departed Yakutat.
- 4 The flight was routine to the time of its last position report at 0510 at which time it was at 10,000 feet and 146 miles southeast of Yakutat
- 5. Weather data available indicates that atmospheric conditions at the cruising altitude of 10,000 feet were not conducive to airplane icing or carburetor icing.

Probable Cause

There is not sufficient evidence for the Board to make any determination as to the probable cause for this accident

BY THE CIVIL AERONAUTICS BOADD

/s/ JOSEPH J. O'CONNELL, JR

/s/ OSWALD RYAN

/s/ JOSH LEE

/s/ HAROLD A. JONES

/s/ RUSSELL B. ADAMS

Supplemental Data

Investigation and Hearing

The Civil Aeronautics Board received notification of the accident at 0715, November 4, 1948, by CAA Communications from Merrill Field, and immediately initiated an investigation in accordance with the provisions of Section 702 (a) (2) of the Civil Aeronautics Act of 1938 as As part of the investigation the hearing was held February 28, 1949, in Anchorage, Alaska.

Air Carrier

Pacific Alaska Air Express is an Alaskan Corporation with principal place of business in Anchorage, Alaska At the time of the accident the company held an operating certificate, No. 7-142, authorizing the carriage of passengers and cargo within the continental limits of the United States, Canada, Alaska and Mexico. They also held a letter of registration as an irregular carrier No. 1533, issued by the Civil Aeronautics Board, February 4, 1948.

Flight Personnel

Captain Andrew R. Kinnear, age 28, held a valid airman certificate with an cording to company records held an airman certificate with a multi-engine and instrument rating and had a total time of 1,800 hours, 325 of which were in multiengine equipment CAA Airman records indicate, however, that he only held a student certificate and an A&E license. had been employed by the company since

airline transport pilot rating and at the time of the accident had a total of 3,600

multi-engine equipment. His last physi-

cal examination was on October 20, 1948

Copilot Richard A Wilson, age 28, ac-

flying hours, 3,200 of which were in

August 30, 1948 His last physical examination had been accomplished on April 27, 1948.

The Aircraft

The aircraft, a Douglas DC-3C, NC-66637, currently certificated by the CAA, was owned by Pacific Alaska Air Express and was manufactured June, 1943, and had a total number of flying hours of 4,320. It was equipped with two Pratt and Whitney engines S1C3G. The total time on the engines is unknown. It had accumulated 348 hours since the last overhaul. Make, model and type of propellers is also unknown.

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